

**IT IS THE VENDOR'S RESPONSIBILITY TO
CHECK FOR ADDENDUM PRIOR TO SUBMITTING PROPOSALS**

NOTICE TO BIDDERS SPECIFICATION NO. 05-034

The City of Lincoln, Nebraska intends to purchase and invites you to submit a sealed bid for:

TRUCK MOUNTED HYDRAULIC KNUCKLE BOOM LOADER

Sealed bids will be received by the City of Lincoln, Nebraska on or before 12:00 noon Wednesday, February 16, 2005 in the office of the Purchasing Agent, Suite 200, K Street Complex, Southwest Wing, 440 South 8th Street, Lincoln, Nebraska 68508. Bids will be publicly opened and read at the K Street Complex.

Bidders should take caution if U.S. mail or mail delivery services are used for the submission of bids. Mailing should be made in sufficient time for bids to arrive in the Purchasing Division, prior to the time and date specified above. Late bids will not be considered. **Fax or e-mail bids are not acceptable. Bid response must be in a sealed envelope.**

**PROPOSAL
SPECIFICATION NO. 05-034**

**BID OPENING TIME: 12:00 NOON
DATE: February 16, 2005**

<u>Item No.</u>	<u>Item</u>	<u>Est Qty</u>	<u>Unit</u>	<u>Price/Unit</u>	<u>Total Cost</u>
1.	Truck Mounted Knuckle Boom Loader as per Specifications Make _____ Model _____	1	Each	\$ _____	\$ _____
2.	Service manuals	2	Each	\$ _____	\$ _____
3.	Parts manuals	2	Each	\$ _____	\$ _____
4.	Operators Manual	2	Each	\$ _____	\$ _____

No Bid Security Required

ADDENDA RECEIPT: The receipt of addenda to the specifications numbers ____ through ____ are hereby acknowledged. Failure of any bidder to receive any addendum or interpretation of the specifications shall not relieve the bidder from obligations specified in the bid request. all addenda shall become part of the final contract document.

AFFIRMATIVE ACTION PROGRAM: Successful bidder will be required to comply with the provisions of the City's Affirmative Action Policy (Contract Compliance, Sec. 1.16). The Equal Opportunity Officer will determine compliance or non-compliance with the City's policy upon a complete and substantial review of successful bidder's equal opportunity policies, procedures and practices.

The undersigned signatory for the bidder represents and warrants that he has full and complete authority to submit this proposal to the City, and to enter into a contract if this proposal is accepted.

**RETURN 2 COMPLETE COPIES OF PROPOSAL AND SUPPORTING MATERIAL.
MARK OUTSIDE OF BID ENVELOPE: SEALED BID FOR SPEC.05-034**

COMPANY NAME

BY (Signature)

STREET ADDRESS or P.O. BOX

(Print Name)

CITY, STATE ZIP CODE

(Title)

TELEPHONE

(Date)

EMPLOYER'S FEDERAL I.D. NO.
OR SOCIAL SECURITY NUMBER

ESTIMATED DELIVERY DAYS

TERMS OF PAYMENT

Bids may be inspected in the Purchasing Division offices during normal business hours, **after** tabulation by the purchasing agent. If you desire a copy of the bid tabulation to be mailed to you, you must enclose a self-addressed stamped envelope with your bidding documents. Bid tabulations can also be viewed on our website at: lincoln.ne.gov
Keyword: bid

INSTRUCTIONS TO BIDDERS

CITY OF LINCOLN, NEBRASKA PURCHASING DIVISION

1. BIDDING PROCEDURE

- 1.1 Bidder shall submit two (2) complete sets of the bid documents and all supporting material. All appropriate blanks shall be completed. Any interlineation, alteration or erasure on the specification document shall be initialed by the signer of the bid. Bidder shall not change the proposal form nor make additional stipulations on the specification document. Any amplified or qualifying information shall be on the bidder's letterhead and firmly attached to the specification document.
- 1.2 Bid prices shall be submitted on the Proposal Form included in the bid document.
- 1.3 Bidders may submit a bid on an "all or none" or "lump sum" basis, but should also submit a quotation on an item-by-item basis. Bidding documents shall be clearly marked indicating the kind of proposal being submitted.
- 1.4 Each bid must be legibly printed in ink or by typewriter, include the full name, business address, and telephone number of the bidder; and be signed in ink by the bidder.
- 1.5 A bid by a firm or organization other than a corporation must include the name and address of each member.
- 1.6 A bid by a corporation must be signed in the name of such corporation by a duly authorized official thereof.
- 1.7 Any person signing a bid for a firm, corporation, or other organization must show evidence of his authority so to bind such firm, corporation, or organization.
- 1.8 Bids received after the time and date established for receiving bids will be rejected.

2. BIDDER'S SECURITY

- 2.1 Bid security, as a guarantee of good faith, in the form of a certified check, cashier's check, or bidder's bond, may be required to be submitted with this bid document, as indicated of the Proposal Form.
- 2.2 If alternate bids are submitted, only one bid security will be required, provided the bid security is based on the amount of the highest gross bid.
- 2.3 Such bid security will be returned to the unsuccessful bidders when the award of bid is made.
- 2.4 Bid security will be returned to the successful bidder(s) as follows:
 - 2.4.1 For single order bids with specified quantities: upon the delivery of all equipment or merchandise, and upon final acceptance by the City.
 - 2.4.2 For all other contracts: upon approval by the City of the executed contract and bonds.
- 2.5 City shall have the right to retain the bid security of bidders to whom an award is being considered until either:
 - 2.5.1 A contract has been executed and bonds have been furnished.
 - 2.5.2 The specified time has elapsed so that the bids may be withdrawn.
 - 2.5.3 All bids have been rejected.

- 2.6 Bid security will be forfeited to the City as full liquidated damages, but not as a penalty, for any of the following reasons, as pertains to this specification document:

- 2.6.1 If the bidder fails to deliver the equipment or merchandise in full compliance with the accepted proposal and specifications.
- 2.6.2 If the bidder fails or refuses to enter into a contract on forms provided by the City, and/or if the bidder fails to provide sufficient bonds or insurance within the time period as established in this specification document.

3. EQUAL OPPORTUNITY

- 3.1 Each bidder agrees that it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, ancestry, disability, age, or marital status. Bidder shall fully comply with the provisions of Chapter 11.08 of the Lincoln Municipal Code.
- 3.2 Successful bidder will be required to comply with the provisions of the City's Affirmative Action Policy (Contract Compliance, Sec. 1.16).
- 3.3 The Equal Opportunity Officer will determine compliance or non-compliance with the City's Affirmative Action Policy upon a complete and substantial review of successful bidder's equal opportunity policies, procedures and practices.

4. DATA PRIVACY

- 4.1 Bidder agrees to abide by all applicable State and Federal laws and regulations concerning the handling and disclosure of private and confidential information concerning individuals and corporations as to inventions, copyrights, patents and patent rights.
- 4.2 The bidder agrees to hold the City harmless from any claims resulting from the bidder's unlawful disclosure or use of private or confidential information.

5. BIDDER'S REPRESENTATION

- 5.1 Each bidder by signing and submitting a bid, represents that the bidder has read and understands the specification documents, and the bid has been made in accordance therewith.
- 5.2 Each bidder for services further represents that the bidder is familiar with the local conditions under which the work is to be done and has correlated the observations with the requirements of the bid documents.

6. INDEPENDENT PRICE DETERMINATION

- 6.1 By signing and submitting this bid, the bidder certifies that the prices in this bid have been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor; unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder prior to bid opening directly or indirectly to any other bidder or to any competitor; no attempt has been made, or will be made, by the bidder to induce any person or firm to submit, or not to submit, a bid for the purpose of restricting competition.

7. CLARIFICATION OF SPECIFICATION DOCUMENTS

- 7.1 Bidders shall promptly notify the Purchasing Agent of any ambiguity, inconsistency or error which they may discover upon examination of the specification documents.
- 7.2 Bidders desiring clarification or interpretation of the specification documents shall make a written request which must reach the Purchasing Agent at least seven (7) calendar days prior to the date and time for receipt of bids.
- 7.3 Interpretations, corrections and changes made to the specification documents will be made by written addenda.
- 7.4 Oral interpretations or changes to the Specification Documents made in any other manner, will not be binding on the City; and bidders shall not rely upon such interpretations or changes.

8. ADDENDA

- 8.1 Addenda are written instruments issued by the City prior to the date for receipt of bids which modify or interpret the specification document by addition, deletion, clarification or correction.
- 8.2 Addenda will be mailed or delivered to all who are known by the City to have received a complete set of specification documents.
- 8.3 Copies of addenda will be made available for inspection at the office of the Purchasing Agent.
- 8.4 No addendum will be issued later than forty-eight (48) hours prior to the date and time for receipt of bids, except an addendum withdrawing the invitation to bid, or an addendum which includes postponement of the bid.
- 8.5 Bidders shall ascertain prior to submitting their bid that they have received all addenda issued, and they shall acknowledge receipt of addenda on the proposal form.

9. ANTI-LOBBYING PROVISION

- 9.1 During the period between the bid close date and the contract award, bidders, including their agents and representatives, shall not directly discuss or promote their bid with any member of the City Council or City Staff except in the course of City-sponsored inquiries, briefings, interviews, or presentations, unless requested by the City.

10. BRAND NAMES

- 10.1 Wherever in the specifications or proposal form brand names, manufacturer, trade name, or catalog numbers are specified, it is for the purpose of establishing a grade or quality of material only; and the term "or equal" is deemed to follow.
- 10.2 It is the bidder's responsibility to identify any alternate items offered in the bid, and prove to the satisfaction of the City that said item is equal to, or better than, the product specified.
- 10.3 Bids for alternate items shall be stated in the appropriate brand on the proposal form, or if the proposal form does not contain blanks for alternates, bidder MUST attach to the specification documents on Company letterhead a statement identifying the manufacturer and brand name of each proposed alternate, plus a complete description of the alternate items including illustrations, performance test data and any other information necessary for an evaluation. The bidder must indicate any variances by item number

from the specification document no matter how slight. Bidder must fully explain the variances from the specification document, since brochure information may not be sufficient.

- 10.4 If variations are not stated in the proposal, it will be assumed that the item being bid fully complies with the City's specifications.

11. DEMONSTRATIONS/SAMPLES

- 11.1 Bidders shall demonstrate the exact item(s) proposed within seven (7) calendar days from receipt of such request from the City.
- 11.2 Such demonstration can be at the City delivery location or a surrounding community.
- 11.3 If bidder does not have an item in the area, it will be at the bidder's expense to send appropriate City personnel to the nearest location to view and inspect proposed item(s).
- 11.4 If items are small and malleable, and the bidder is proposing an alternate product, the bidder MUST supply a sample of the exact item. Samples will be returned at bidder's expense after receipt by the City of acceptable goods. Bidders must indicate how samples are to be returned.

12. DELIVERY

- 12.1 Each bidder shall state on his proposal form the date upon which he can make delivery of all equipment or merchandise. Time required for delivery is hereby made an essential element of the bid.
- 12.2 The City reserves the right to cancel orders, or any part thereof, without obligation, if delivery is not made within the time(s) specified on the proposal form.
- 12.3 All bids shall be based upon **inside** delivery of the equipment or merchandise F.O.B. the City at the location specified by the City, with all transportation charges paid.

13. WARRANTIES, GUARANTEES AND MAINTENANCE

- 13.1 Copies of the following documents must accompany the bid proposal for all items being bid:
 - 13.1.1 Manufacturer's warranties and/or guarantees.
 - 13.1.2 Bidder's maintenance policies and associated costs.
- 13.2 As a minimum requirement of the City, the bidder will guarantee in writing that any defective components discovered within a one (1) year period after the date of acceptance shall be replaced at no expense to the City. Replacement parts of defective components shall be shipped at no cost to the City. Shipping costs for defective parts required to be returned to the bidder shall be paid by the bidder.
- 13.3 Bidder Warrants and represents to the City that all software/firmware/hardware/equipment /systems developed, distributed, installed or programmed by Bidder pursuant to this Specification and Agreement.
 - 13.3.1 That all date recognition and processing by the software/firmware/hardware/equipment/system will include the four-digit-year format and will correctly recognize and process the date of February 29, and any related data, during Leap years; and
 - 13.3.2 That all date sorting by the software /firmware/hardware/ equipment/system that includes a "year category" shall be done based on the four-digit-year format. Upon being notified in writing by the City of the failure of any software/ firmware/

hardware /equipment /systems to comply with this Specification and Agreement, Contractor will, within 60 days and at no cost to the City, replace or correct the non-complying software/ firmware/ hardware/ equipment/ systems with software/firmware/ hardware/equipment/ systems that does comply with this Specification and Agreement.

- 13.3.3 No Disclaimers: The warranties and representations set forth in this section 13.3 shall not be subject to any disclaimer or exclusion of warranties or to any limitations of Licensor's liability under this Specification and Agreement.

14. ACCEPTANCE OF MATERIAL

- 14.1 All components used in the manufacture or construction of materials, supplies and equipment, and all finished materials, shall be new, the latest make/model, of the best quality, and the highest grade workmanship.
- 14.2 Material delivered under this proposal shall remain the property of the bidder until:
- 14.2.1 A physical inspection and actual usage of this material is made and found to be acceptable to the City; and
- 14.2.2 Material is determined to be in full compliance with the specifications and accepted proposal.
- 14.3 In the event the delivered material is found to be defective or does not conform to the specification documents and accepted proposal, then the City reserves the right to cancel the order upon written notice to the bidder and return materials to the bidder at bidder's expense.
- 14.4 Successful bidder shall be required to furnish title to the material, free and clear of all liens and encumbrances, issued in the name of the City of Lincoln, Nebraska, as required by the specification documents or purchase orders.
- 14.5 Selling dealer's advertising decals, stickers or other signs shall not be affixed to equipment. Vehicle mud flaps shall be installed blank side out with no advertisements. Manufacturer's standard production forgings, stampings, nameplates and logos are acceptable.

15. BID EVALUATION AND AWARD

- 15.1 The signed bid proposal shall be considered an offer on the part of the bidder. Such offer shall be deemed accepted upon issuance by the City of purchase orders, contract award notifications, or other contract documents appropriate to the work.
- 15.2 No bid shall be modified or withdrawn for a period of ninety (90) calendar days after the time and date established for receiving bids, and each bidder so agrees in submitting the bid.
- 15.3 In case of a discrepancy between the unit prices and their extensions, the unit prices shall govern.
- 15.4 The bid will be awarded to the lowest responsive, responsible bidder whose proposal will be most advantageous to the City, and as the City deems will best serve their requirements.
- 15.5 The City reserves the right to accept or reject any or all bids; to request rebids; to award bids item-by-item, by groups, or "lump sum"; to waive irregularities and technicalities in bids; such as shall best serve the requirements and interests of the City.

16. INDEMNIFICATION

- 16.1 The bidder shall indemnify and hold harmless the City, its members, its officers and employees from and against all claims, damages, losses, and expenses, including, but not limited to attorney's fees arising out of or resulting from the performance of the contract, provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property other than goods, materials and equipment furnished under this contract) including the loss or use resulting therefrom; is caused in whole or part by any negligent act or omission of the bidder, any subcontractor, or anyone directly or indirectly employed by any one of them or anyone for whose acts made by any of them may be liable, regardless of whether or not it is caused by a party indemnified hereunder.
- 16.2 In any and all claims against the City or any of its members, officers or employees by an employee of the bidder, any subcontractor, anyone directly or indirectly employed by any of them or by anyone for whose acts made by any of them may be liable, the indemnification obligation under paragraph 16.1 shall not be limited in any way by any limitation of the amount or type of damages, compensation or benefits payable by or for the bidder or any subcontractor under worker's or workmen's compensation acts, disability benefit acts or other employee benefit acts.

17. TERMS OF PAYMENT

- 17.1 Unless other specification provisions state otherwise, payment in full will be made by the City within thirty (30) calendar days after all labor has been performed and all equipment or other merchandise has been delivered, and all such labor and equipment and other materials have met all contract specifications.

18. LAWS

- 18.1 The Laws of the State of Nebraska shall govern the rights, obligations, and remedies of the Parties under this proposal and any agreement reached as a result of this process.

19. AFFIRMATIVE ACTION

- 19.1 The City of Lincoln-Lancaster County Purchasing Division provides equal opportunity for all bidders and encourages minority businesses and women's business enterprises to participate in our bidding process.

20. LIVING WAGE

- 20.1 The bidders agree to pay all employees employed in the performance of this contract, a base wage of not less than the City Living Wage per section 2.81.010 of the Lincoln Municipal Code. This wage is subject to change up or down every July.

EQUIPMENT SPECIFICATIONS

TRUCK MOUNTED HYDRAULIC KNUCKLE BOOM LOADER

1. INTENT

- 1.1 This Knuckle Boom Loader will be mounted on a new 2005 or 2006, 4x2 cab and chassis provided by the City of Lincoln, to the successful bidders location, specifically designed to meet all requirements of the Knuckle Boom Loader and the City of Lincoln including but not limited to Engine, Transmission, GAWR, GVWR, WB, CA, AF and Frame Design.
- 1.2 This bid will include providing, installing, testing, training and delivery of a complete Truck Mounted Hydraulic Knuckle Boom Loader, ready for operation as more clearly described in the technical specifications.
- 1.3 Complete unit must meet all Federal/State/Local and OSHA/ANSI safety standards.

2. APPLICATION

- 2.1 This Knuckle Boom Loader will be utilized by The City of Lincoln Parks Forestry Section primarily in truck loading of tree trunks and large branches but must also be capable of loading brush and miscellaneous debris.
- 2.2 This application requires a rear mount design with integral folding-leg type stabilizers.

3. MODEL

- 3.1 Equipment being bid shall be new and of current model of proven performance under standard production by the manufacture. Equipment shall be furnished complete as regularly advertised and marketed, including all specified accessories, tools, manuals and special features. All standard equipment shall be provided even through such items may not be specifically mentioned in these specifications.
 - 3.1.1 The following example models are provided solely to indicate the size, type and class of equipment requested:
 - 3.1.1.1 Northshore Mfg. Model 1010RM
- 3.2 Primary design considerations as follows:
 - 3.2.1 The Truck Mounted Hydraulic Knuckle Boom Loader must be specifically designed for the forestry and logging profession.
 - 3.2.2 General purpose material handling loaders and cranes are not acceptable.

4. RESPONSIBILITY OF BIDDERS

- 4.1 Responding bidders must supply the following information:
 - 4.1.1 All cab and chassis requirements and recommendations for the Knuckle Boom Loader being provided.
 - 4.1.2 Engineering quality 1/16" scale drawings of a completely operational, Knuckle Boom Loader, as described in the base specifications, installed on a typical conventional cab 4x2 cab and chassis as indicated in Item 4.1.1.
 - 4.1.3 List of recent sales of similar design Knuckle Boom Loaders, to include the company name, address, contact, telephone number, delivery date and equipment model.

5. BID AWARD CRITERIA

- 5.1 Conformance to the Equipment Specifications concerning the size, type and class of the Knuckle Boom Loader offered, and the ability to provide specific equipment as indicated in the technical specifications.
- 5.2 The Knuckle Boom Loaders ability to satisfactorily perform in its intended application, as determined through the Field Test and contact with current equipment users.
- 5.3 Bidders ability to provide product support (i.e. parts, service, training and technical assistance).
- 5.4 Previous experience with both the bidder and the product being offered.
- 5.5 Best overall value to The City of Lincoln
- 5.6 Delivery schedule.
- 5.7 **Loaders offered which deviate in some areas of the technical specifications but are equal in design, performance and quality will be given consideration. The right to evaluate specification compliance and equivalency is reserved by the City.**

6. FIELD TESTING

- 6.1 If requested, responding bidders shall make available to The City of Lincoln a Truck Mounted Hydraulic Knuckle Boom Loader of the same model bid with similar equipment for evaluation of both machine performance and compatibility with the intended application.
- 6.2 A minimum of two (2) working days shall be required to effectively perform the desired evaluation.
- 6.3 Responding bidders shall make available a manufacturer or dealer representative to instruct City of Lincoln employees on the proper safety, operation and maintenance checks, prior to the evaluation period.
- 6.4 The City of Lincoln will return the Knuckle Boom Loader clean, and with the same amount of fuel, and in the same condition as when received.
- 6.5 The City of Lincoln will not be responsible for any rental or transportation costs associated with this evaluation process.

Meets Specs.

Yes No

7. HYDRAULIC LOADER

- ___ 7.1 Knuckle boom design with 3' telescoping tip section.
- ___ 7.2 Truck mounted.
- ___ 7.3 Full hydraulic powered, pedestal mounted over rear axle.
- ___ 7.4 Stowed travel height 12' maximum.
- ___ 7.5 Maximum overall length 26', based on 107" BBC cab and chassis.
- ___ 7.6 Capable of proper operation in an ambient temperature range of -10⁰ F. through 110⁰ F.

8. PERFORMANCE

- ___ 8.1 25' horizontal reach with 35' working height to boom tip.
- ___ 8.2 The following minimum capacities based on SAE Standard 87% rating and 5' elevation and less weight of attachment:
 - ___ 8.2.1 Radius 10', lift capacity 10,000 lbs.

Meets Specs.

Yes No

- ___ 8.2.2 Radius 15', lift capacity 7,000 lbs.
- ___ 8.2.3 Radius 20', lift capacity 5,000 lbs.
- ___ 8.2.4 Radius 25', lift capacity 2,084 lbs.
- ___ 8.3 Below grade reach 7' minimum.
- ___ 8.4 550⁰ swing rotation with mechanical stops and a minimum swing torque of 14,500 ft. lbs.

9. BOOMS

- ___ 9.1 Booms constructed of high-tensile 50,000 psi yield fabricated structural tube.
- ___ 9.2 Greasable 2.5" heat treated high alloy steel pivot pins on mag bronze bushings.
- ___ 9.3 Telescoping design 3' boom extension to accommodate dimensional and performance requirements.

10. STABILIZERS

- ___ 10.1 Folding leg type integral with loader.
- ___ 10.2 Rear mounted with 14' spread at ground.
- ___ 10.3 Individual stabilizer control valves at operators station.
- ___ 10.4 Approximately 16"W X 20"L pivoting stabilizer pads .
- ___ 10.5 Stabilizers must be capable of 9" below grade reach for use on uneven ground.

11. SWING SYSTEM

- ___ 11.1 550⁰ rotation, ring gear and pinion gear set driven by an axial piston hydraulic motor through a drive reduction gearbox with mechanical stops.
- ___ 11.2 Swing speed 2-5 RPM
- ___ 11.3 Swing torque of 14,545 ft. lbs. minimum.
- ___ 11.4 28" turntable bearing.
- ___ 11.5 Swing system to be secured by house lock during transit.

12. STRUCTURAL

- ___ 12.1 Rolled steel column welded to sub-frame.
- ___ 12.2 Sub-frame to be constructed of 12" - 30.00 lb./ft. structural steel and be full length of open truck
- ___ 12.3 Stabilizers and column to be integral with sub frame.

13. OPERATORS STATION

- ___ 13.1 Rotating operators platform to be mounted on the upper right hand side of the tower with vinyl covered fold down seat, dual armrests and seat belt.
- ___ 13.1.1 Fixed access ladder and right side entry stage platform will be installed on the flatbed to provide for a safe secure entrance point.
- ___ 13.1.2 Platform and entry stage platform will be constructed of reinforced expanded metal and include a safety guard rail.

Meets Specs.

Yes No

14. HYDRAULIC SYSTEM

- ___ ___ 14.1 System type will be triple gear pump design with 2,200 psi system pressure.
- ___ ___ 14.2 Fully independent simultaneous operation of main boom, grapple and swing with flow diverted to operate stabilizers.
- ___ ___ 14.3 Control valves will be stacked sections as follows:
- ___ ___ 14.3.1 Valves to contain port reliefs and anti-cavitation valves for loader protection and control.
- ___ ___ 14.3.3 Individual port reliefs for swing, main and secondary boom circuits.
- ___ ___ 14.3.4 Mechanical joystick controls to operate main boom, stick boom and grapple functions.
- ___ ___ 14.3.5 Mechanical single lever control to operate extension function.
- ___ ___ 14.3.5 Mechanical foot pedal control to operate swing function.
- ___ ___ 14.4 Hydraulic pumps will be 24-24-12 GPM triple gear type operating at 1400 rpm maximum.
- ___ ___ 14.4.1 Pump to be transmission PTO shaft driven, chassis mounted.
- ___ ___ 14.5 PTO will be a Muncie Series CS20 for use with Allison RDS transmission complete with the following features:
- ___ ___ 14.5.1 Power shift design AHot Shift® with activation through transmission shift pad mode button.
- ___ ___ 14.5.1.1 Transmission Auxiliary Function Range Inhibit Activated
- ___ ___ 14.5.2 Pressure lubricated.
- ___ ___ 14.5.3 Crane manufactures recommended ratio with electronic over-speed control.
- ___ ___ 14.6 PTO to hydraulic pump drive to be as follow:
- ___ ___ 14.6.1 Minimum Spicer 1350 drive components.
- ___ ___ 14.6.2 Slip yoke design with greasable slip yoke and u-joints.
- ___ ___ 14.6.3 Shaft to be professionally balanced to insure smooth operation.
- ___ ___ 14.7 Seventy-Five (75) gallon hydraulic oil reservoir as follows:
- ___ ___ 14.7.1 Reservoir will be 3/16" steel construction, rectangular shape mounted on left side of flatbed directly behind bulkhead.
- ___ ___ 14.7.2 Filtered breather with sight gauge, magnetic drain plug, screened filler neck, filter condition gauge and suction screen.
- ___ ___ 14.7.3 Tank mounted 10 micron in-tank filter.
- ___ ___ 14.7.4 Service shut-off valve.
- ___ ___ 14.8 All boom and stabilizer cylinders will be equipped with pilot operated holding valves for protection in the event of hose failure.
- ___ ___ 14.9 Hydraulic sensing demand-type throttle control.

Meets Specs.

Yes No

- | | | |
|-----|-----|--|
| ___ | ___ | 14.9 All hydraulic cylinders will be double acting, solid rod and screw on head with approximate dimensions as follows: |
| ___ | ___ | 14.9.1 Main boom 7" x 36" with 3" rod. |
| ___ | ___ | 14.9.2 Stick boom 6" x 32" with 3" rod. |
| ___ | ___ | 14.9.3 Stabilizers 6" x 17" with 3" rod. |
| ___ | ___ | 14.9.4 Telescopic 6" x 36" with 3" rod. |
| ___ | ___ | 14.10 Swing system to be driven by an axial piston hydraulic motor. |
| ___ | ___ | 14.11 Heavy-duty air to oil hydraulic oil cooler. |
| ___ | ___ | 14.12 High pressure steel tubing with 4000 psi wear resistant hoses at pivot points with shielded protective hose wraps. |
| ___ | ___ | 14.12.1 Steel tubing to be securely installed on the top side of booms where possible. |
| ___ | ___ | 14.12.2 Hoses from stick boom to extension will be shielded with protective hose wrap. |
| ___ | ___ | 14.13 Fittings to be JIC type. |

15. GRAPPLE

- | | | |
|-----|-----|---|
| ___ | ___ | 15.1 Heavy duty grapple with rotator and hanger.
(Northshore Mfg. Standard 1/4 Cord Butt Type Grapple). |
| ___ | ___ | 15.2 Critical areas of jaws to be reinforced and designed to protect cylinder rods. |
| ___ | ___ | 15.3 Abrasion resistant rounded tip jaws. |
| ___ | ___ | 15.4 Cylinders and jaw configuration will combine to provide require force to lift and hold large logs. |
| ___ | ___ | 15.5 Head assembly to be constructed of high tensile steel with heavy duty bearings and hardened gears. |
| ___ | ___ | 15.6 Friction knuckle design hanger with disc type brake to retard grapple sway. |
| ___ | ___ | 15.7 Minimum 10,000 lb. lift capacity. |
| ___ | ___ | 15.8 Grapple cylinders to be double acting, solid rod with screw on head. |
| ___ | ___ | 15.9 Pin diameter 1.5" |
| ___ | ___ | 15.10 Width 20". |
| ___ | ___ | 15.11 Full open inside jaw width 66" |
| ___ | ___ | 15.12 Rotation will be unlimited in either direction. |
| ___ | ___ | 15.13 Minimum 1,900 ft./lb. rotator torque. |
| ___ | ___ | 15.14 All hydraulic hoses associated with the grapple and rotator will be shielded with protective hose wrap. |

16. FLATBED

- | | | |
|-----|-----|---|
| ___ | ___ | 16.1 Steel construction electrically welded flatbed will be fabricated onto the sub-frame of the loader structure. |
| ___ | ___ | 16.2 Loader structure sub-frame will act as long members of the flatbed with 4" structural channel cross members welded on 16" centers. |
| ___ | ___ | 16.3 3/16" tread plate floor with 4" broken side edge. |
| ___ | ___ | 16.4 Flatbed will be full length and approximately 96" wide. |

Meets Specs.

Yes No

- ___ ___ 16.5 Three (3) step 24" wide enclosed stair design curb side entry access.
- ___ ___ 16.5.1 Stairs will be constructed of tread grip ladder rungs and be a integral part of the platform.
- ___ ___ 16.5.2 Staircase will be constructed of same tread plate as decking and be located as far forward as possible on the platform.
- ___ ___ 16.5.3 First step to be approximately 16 inches off the ground with even split step heights to platform.
- ___ ___ 16.5.4 Front and top, low profile entry access handles will be fabricated from 3/4" cold finished round and installed on right and left side of staircase.

17. BULKHEAD

- ___ ___ 17.1 Full height, full width heavy-duty integral bulkhead.
- ___ ___ 17.2 Bulkhead construction to be 3"x 3" - 1/4" wall square tube fame and supports covered with 3/4" - 13 - 15 flattened expanded metal.

18. GRAPPLE STOW AND BUMPER

- ___ ___ 18.1 Grapple storage will be front hung design directly in front of stationary grill.
- ___ ___ 18.2 Custom design grapple cradle, grill guard and bumper will be designed specifically for chassis provided and allow tilt forward hood to fully open when the grapple is out of the cradle.
- ___ ___ 18.3 Grapple will be closed on the cradle structure to secure during transport.
- ___ ___ 18.4 Bumper will be constructed of 10" - 30.00 lbs./ft. structural channel.
- ___ ___ 18.5 Grill guard and grapple cradle will be constructed of 6" x 6" - 1/4" wall square tube.

19. HYDRAULIC WINCH

- ___ ___ 19.1 One (1) Ramsey Model H-800 hydraulic industrial winch.
- ___ ___ 19.2 Hydraulic power to winch will be provided by the loader hydraulic system.
- ___ ___ 19.3 Winch to be securely mounted on top center of the stabilizer frame with reinforcement as required.
- ___ ___ 19.4 20,000 lb. line pull first wrap.
- ___ ___ 19.5 Free spool clutch.
- ___ ___ 19.6 Oil-cooled worm brake.
- ___ ___ 19.7 Roller type fairlead.
- ___ ___ 19.8 150 ft. **2"** high quality fiber core cable with sling eye hook.
- ___ ___ 19.9 Holland #DB-060FQ1 rigid mount bolt-on drawbar will be installed on the back side of the stabilizer frame to act as stow device for the winch cable.
- ___ ___ 19.10 Winch control valve will be installed on curb side rear of platform within easy reach of the operator from ground level.

Meets Specs.

Yes No

20. UNDERBODY TOOL BOXES

- ___ ___ 20.1 Curb side underbody box will be 60"L. x 24"D. x 30"H.
- ___ ___ 20.2 Street side underbody box will be 84"L. x 24"D. x 30"H.
- ___ ___ 20.3 .100 mil polished diamond tread aluminum construction.
- ___ ___ 20.4 Recessed beveled door, rain channel design.
- ___ ___ 20.5 Reinforced door backbone to strengthen door and protect the latch mechanism.
- ___ ___ 20.6 Automotive style door gasket.
- ___ ___ 20.7 Continuous stainless steel hinge.
- ___ ___ 20.8 Single drop down door with PVC coated steel wire lanyards.
- ___ ___ 20.9 Two (2) stainless steel folding T-handle latches, per box.
- ___ ___ 20.10 Key locking with all locks keyed alike.
- ___ ___ 20.11 One (1) heavy-duty full width adjustable shelf.
- ___ ___ 20.12 Boxes will be ABuyers Products Custom® or equal.

21. LIGHTING AND ELECTRICAL SYSTEM

- ___ ___ 21.1 Lighting must meet F.M.V.S. S. 108
- ___ ___ 21.2 All clearance, side marker and rear identification markers required to meet 108 Standards to be shock resistant LED.
- ___ ___ 21.3 Existing stop/tail/turn and backup lights shall be repositioned with installation including heavy-duty steel light guards.
- ___ ___ 21.4 Wiring harness for all 108 lighting to be factory assembled one piece design with sealed connectors securely attached to the body.
 - ___ ___ 21.4.1 Splices will be limited as much as possible but if required will be solder heat shrink connectors.
 - ___ ___ 21.4.2 Wiring will be loomed and securely attached using insulated stainless steel cable/wire clamps and stainless steel hardware.
 - ___ ___ 21.4.2.1 The use of adhesive or frame clip type wire/clamps is not acceptable.
- ___ ___ 21.5 Whelen ATowman's Edge Super-LED® light bar installed off the front of the bulkhead with the following:
 - ___ ___ 21.5.1 Six (6) rear facing 400 Series LED traffic advisors.
 - ___ ___ 21.5.2 Four (4) corner angle LED amber strobes.
 - ___ ___ 21.5.3 Four (4) front facing LED amber strobes.
 - ___ ___ 21.5.4 Two (2) rear facing LED amber strobes.
 - ___ ___ 21.5.5 Two (2) rear facing halogen work lights.
 - ___ ___ 21.5.6 Two (2) front facing halogen work lights.
 - ___ ___ 21.5.7 Two (2) side halogen alley lights.
- ___ ___ 21.6 Traffic advisor will be controlled through a under dash mounted Whelen ATACTRL1A® control head.

Meets Specs.

Yes No

- | | | |
|-----|-----|---|
| ___ | ___ | 21.7 One (1) Whelen Power Control Center (#PCCHD1) under dash mounted, with switches labeled and wired as follows: (left to right). |
| ___ | ___ | 21.6.1 Front strobes. |
| ___ | ___ | 21.6.2 Rear strobes. |
| ___ | ___ | 21.6.3 Front work lights. |
| ___ | ___ | 21.6.4 Rear work lights. |
| ___ | ___ | 21.6.5 Right alley light. |
| ___ | ___ | 21.6.6 Left alley light |
| ___ | ___ | 21.8 Golight Model 2020 with #49420 flood lamp, permanent mount work light with dash mounted remote control installed in front center area of cab roof. |

22. MISCELLANEOUS EQUIPMENT

- | | | |
|-----|-----|--|
| ___ | ___ | 22.1 Dash mounted stabilizer warning light to notify operator of stabilizer creep during transport. |
| ___ | ___ | 22.2 Stabilizer warning alarm to sound when stabilizers are being lowered. |
| ___ | ___ | 22.3 Rear mud flaps. |
| ___ | ___ | 22.4 Reflective tape on broken edge of platform and on exposed stabilizer frame at rear of the unit. |
| ___ | ___ | 22.5 Any special tools required to complete routine service and inspection. |

23. PAINTING

- | | | |
|-----|-----|---|
| ___ | ___ | 23.1 Finish coat of loader to be manufactures standard color with platform, grapple stow, bumper and associated equipment to be black. |
| ___ | ___ | 23.2 Metal will be completely primed with a rust inhibitive primer/sealer that is recommended by and compatible with the finish coat manufacture. |
| ___ | ___ | 23.3 Primer/sealer will be applied in accordance with the Product Data Sheet. |
| ___ | ___ | 23.4 Finish coat to be Sherwin Williams SUNFIRE acrylic urethane or equal. |
| ___ | ___ | 23.5 Finish coat will be applied in accordance with the Product Data Sheet. |
| ___ | ___ | 23.5.1 Finish must be smooth, shiny, free of runs, overspray and other defects. |
| ___ | ___ | 23.5.2 Entire system will have a minimum of 4.0 mil dry film thickness. |
| ___ | ___ | 23.6 Bidder must provide Product Data Sheets for proposed coating products with the bid proposal. |

24. MANUALS

- | | | |
|-----|-----|---------------------------------|
| ___ | ___ | 24.1 Two (2) service manuals. |
| ___ | ___ | 24.2 Two (2) parts manuals. |
| ___ | ___ | 24.3 Two (2) operators manuals. |

Meets Specs.

Yes No

25. WARRANTY

- ___ ___ 25.1 The manufactures standard warranty shall apply, with a minimum term required by the City of Lincoln of 12 months from date of acceptance.
- ___ ___ 25.2 Please include all warranty details and information with the bid proposal.
- ___ ___ 25.3 During the warranty period, it shall be the responsibility of the seller to perform warranty repairs F.O.B. Lincoln, NE. or at the sellers discretion, to transport the equipment to the seller-s repair facility for such repairs. All transportation costs associated with such warranty repairs will be paid by the seller.

26. DELIVERY AND TRAINING

- ___ ___ 26.1 The successful bidder shall be responsible for the delivery of the Truck Mounted Loader complete and ready for operation to include all manuals and accessory equipment as specified to the Fleet Services Garage, 901 North 6th Street, Lincoln, NE. on a prearranged date and time.
- ___ ___ 26.2 The successful bidder shall provide a minimum of 8 hours of operation and maintenance training at a date and time to be determined by The City of Lincoln.